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Chair

The Honourable Judy A. Sgro

Standing Committee on Transport, Infrastructure and Communities

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● (0850)

[*English*]

The Chair (Hon. Judy A. Sgro (Humber River—Black Creek, Lib.)): I call to order this meeting of the Standing Committee on Transport, Infrastructure and Communities. Pursuant to Standing Order 108(2), we are doing a study assessing the impact of aircraft noise in the vicinity of major Canadian airports.

We will go to committee business for a moment on the issue of the loss of recording from our last meeting.

Perhaps we could get everybody's attention, please.

I have spoken to Mr. Fuhr's office, and he is fine with the way the clerk has suggested that we deal with it, but I will need this motion adopted. I will read it out.

It reads:

> That, due to a technical error that occurred during meeting no. 124 on Tuesday, December 4, 2018, which resulted in a loss of the audio recording required to prepare the evidence, the speaking notes presented by Daniel-Robert Gooch and Glenn Priestley and the written brief submitted by Darren Buss be taken as read and included in the *Evidence* for that meeting and that the clerk inform the witnesses of the committee's decision.

Is there any discussion?

Hearing none, are we agreed?

(Motion agreed to)

The Chair: Thank you.

I'm sorry?

Mr. Vance Badawey (Niagara Centre, Lib.): [*Inaudible—Editor*]

The Chair: The motion was moved by Vance and seconded by Ron.

We go on to our witnesses for our meeting today. From Air Canada, we have Murray Strom, vice-president, flight operations; and Samuel Elfassy, vice-president, safety. Welcome to both of you. Thank you very much for being here.

We are not going to wait for Mr. Wilson. He will be here with us shortly.

Captain Scott Wilson (Vice-President, Flight Operations, WestJet Airlines Ltd.): I'm here.

The Chair: Isn't that terrific? He just walked right through the door. Welcome, Mr. Wilson. Mr. Wilson is from WestJet Airlines.

Okay, we're going to open it up for five minutes maximum. When I raise my hand, please do your closing remarks so that the committee has sufficient time for questions.

Mr. Ron Liepert (Calgary Signal Hill, CPC): With all due respect, you left the impression that Mr. Wilson wasn't here. He was sitting at the table all this time. I think you need to formally introduce Mr. Wilson from WestJet.

The Chair: All right.

Scott Wilson is here. He is vice-president of flight operations with WestJet Airlines. Thank you very much, and sorry for the mix-up.

Who would like to go first for Air Canada?

Mr. Murray Strom (Vice-President, Flight Operations, Air Canada): I'll go first.

Good morning, Madam Chair and members of the committee. My name is Murray Strom. I'm vice-president of flight operations at Air Canada.

I have overall responsibility for all aspects of safe flying operations across Air Canada's mainline fleet. I'm the airline's designated operations manager, responsible to the Minister of Transport for the management of our air operator's certificate and liaison with the international regulatory agencies with which Air Canada operates.

I'm an active Air Canada pilot and presently a triple-7 captain. I operate to all of Air Canada's international destinations.

I'm joined today by my colleague Sam Elfassy, vice-president of safety.

We are pleased to be here today to provide context to our operations and to answer any questions related to the committee's study on the impact of aircraft noise in the vicinity of major Canadian airports.

Since 2001, Air Canada has been an advocate of the balanced approach to aircraft noise management that was developed by ICAO, based in Montreal. The balanced approach is founded on four elements for noise around airports: noise reduction at source, land use management and planning, noise abatement operational procedures, and operating restrictions.

To effectively manage the impact of aircraft noise on communities takes the concerted effort of all parties involved, including airports, Nav Canada, government, and airline communities.

The biggest impact an airline can have is by reducing noise with new aircraft and technology and by supporting the development and implementation of effective noise abatement operational procedures.

Over the years, aircraft manufacturers have made significant progress to reduce aircraft noise. Aircraft today are 75% quieter than they were 50 years ago. Since 2007, Air Canada has invested more than $15 billion to modernize its fleet with new aircraft, such as the Boeing 787 Dreamliner and the Boeing 737 MAX. Supporting many jobs in the Canadian aerospace industry, these aircraft are the quietest in their respective categories. For example, the Dreamliner is more than 60% quieter than other similar airplanes from past years.

In addition to Air Canada's fleet renewal program, we've also been modernizing our A320 jets with new cavity vortex generators since 2015. Newer A320s are in the process of being retrofitted as they undergo maintenance, while older A320s are being retired.

Maintenance schedules are planned months and years in advance, and in order to consider manufacturing schedules and commercial realities, Air Canada had planned originally to retrofit all its A320 aircraft by the end of 2020. However, due to lack of available kits from Airbus, we are now operating under the following schedule: 15% of our fleet completed by the end of 2018, 50% by the end of 2019, 80% by the end of 2020, and the remainder in 2021.

Air Canada is committed to completing this program on an expedited basis. However, we are limited by maintenance schedules and the availability of the vortex kits from the manufacturer. It is important to note that while the program is under way, Air Canada is replacing A320s with quieter, more efficient 737 MAX aircraft and the Canadian-made A220s formerly known as the Bombardier C Series.

Renewing and upgrading our fleet is also reducing greenhouse gases, an important goal for Air Canada, Canadians, and the government. Once this process is complete, our fleet will be among the most fuel-efficient in the world. By the end of 2019 we will have also completed the upgrade of our flight management and guidance systems and the satellite-based navigation systems of our Airbus narrow-body fleet.

These updates will enable the aircraft to fully participate in performance-based navigation initiatives being implemented in airports across the country. This improves fuel efficiency, reduces greenhouse gases, and also reduces noise.

Air carriers operate with the highest safety standards. Our pilots must comply with the navigation and noise abatement procedures set by Nav Canada and airports at all times. We contribute to this process, informed by the balanced approach and Transport Canada's guidelines for implementation of the new and amended abatement procedures.

We also participate in the Toronto industry noise abatement board that provides the technical forum to analyze and consider the operational impact of many of the noise mitigation techniques. We also extend technical expertise to the board and support the effort, with the use of our simulators, to test the proposed approaches.

● (0855)

Another important element of the balanced approach is land use planning. Appropriate land use planning policies are critical to preserve the noise reductions achieved through this $15-billion investment in new aircraft. It is important that local governments and airport authorities work together to prevent further urban encroachment around the airports.

Finally, we must recognize that demand for air travel is on the rise worldwide. In fact, IATA predicts the global passenger demand for air travel will surge from $4 billion in 2017 to over $7.8 billion in 2036. Air travel is no longer a luxury. It is for everyone. It is the middle class that is driving this growth. It is an efficient and cost-effective way to travel; connects family, business people and communities; and promotes trade and tourism. Air travel reduces travel time from days to mere hours. It builds economies. Consider that in Toronto alone, Air Canada connects Canadians to more than 220 destinations directly and that Canada has three airports among the top 50 most connected in the world.

In closing, I'd like to say that Air Canada is proud of its role in Canadian aviation as a global champion for Canada and is proud of its contribution to the national economy. We remain committed to improving our operation in all aspects and live by our motto of “Fly the Flag”.

● (0900)

The Chair: Thank you very much, Mr. Strom.

We'll move on to WestJet Airlines and Mr. Wilson for five minutes, please.

Capt Scott Wilson: Good morning, Madam Chair and members of the committee.

My name is Captain Scott Wilson. I serve as WestJet's vice-president of flight operations and operations manager, responsible for the safety and oversight of WestJet's fleets and daily operations. I also maintain currency as a Boeing 737 pilot across our domestic and international networks.

Thank you for the opportunity to address the committee this morning.

WestJet is very proud of the positive impact we've had on Canadians by offering travellers more choice, lower airfares and the opportunity to connect families and business people, both within Canada and beyond. WestJet is extremely proud of our track record of operating safely and with respect for the environment and for the communities that we serve. This includes a commitment to operate in a way that minimizes the noise footprint from our aircraft in all phases of flight, with particular emphasis on the approach and departure phases.

As an airline, we recognize that we operate within a large and complex ecosystem made up of many partners and stakeholders, including airports and airport authorities, air traffic service providers around the world, aircraft manufacturers, all three levels of government, and of course regulators here in Canada, as well as those in the foreign jurisdictions in which we fly.

The Chair: Could you slow it down a little bit? The translators are having difficulty keeping up with you.

Capt Scott Wilson: I'm sorry. I'm talking like a pilot. I will slow down.

I will begin by outlining our ongoing community consultation process and the way we incorporate public feedback in our discussions and decisions. I'll provide the committee with information about our fleet, how our ongoing investment in the most modern aircraft available helps to reduce noise, and how we operate those aircraft to best minimize the noise footprint over the communities we serve.

Along with Nav Canada and the Canadian Airports Council, WestJet was a key participant in developing the Airspace Change Communications and Consultation Protocol in June of 2015. This is the document that launched an industry-wide commitment to open and transparent engagement with all stakeholders in the communities we serve.

WestJet is an active participant in regular and ongoing community consultations in Canada's four largest cities: Toronto, Montreal, Calgary and Vancouver. At the Vancouver airport, we are actively involved in the development of the five-year noise management plan.

In Calgary, we have given numerous presentations to community members on pilot noise mitigation responsibilities, today's aircraft technology, approach procedure design and the benefits of performance-based navigation. These have been very well received by the public. In fact, along with the Calgary Airport Authority and Nav Canada, we meet with a group of representatives from communities across Calgary every six to eight weeks to discuss aircraft noise and the operational means available to help reduce the impact of aircraft operations on noise in the environment.

On major airspace revisions, we attend open houses to field any operational questions on matters such as steeper approach profiles and variable dispersed lateral paths.

We are continuously engaged with the broader industry, including ICAO, IATA and the FAA, on their noise initiatives, and we attend noise conferences to ensure that we remain current with the latest procedures and technologies.

As my partner at Air Canada mentioned, it is worth mentioning that today's newer-generation aircraft have seen a 90% reduction in noise footprint compared to jet aircraft that first flew over Canada in the 1960s.

WestJet has invested heavily in new state-of-the-art aircraft, including the Boeing 737 Next Generation, or NG, as well as the Boeing 737 MAX narrow-body aircraft. In January, we'll deliver the Boeing 787 Dreamliner, which includes significant noise-reduction features.

For example, the new Boeing 737 MAX aircraft has a 40% smaller noise footprint than even its most recent 737 family member, the NG. The Boeing 787 Dreamliner will have a 60% smaller noise footprint than the Boeing 767 aircraft it will replace in the WestJet fleet.

Aircraft noise is reduced by improvements to aerodynamics and through weight-saving technologies. These improvements allow aircraft to climb higher and faster on takeoff, with less engine thrust. The addition of newer, quiet, high-bypass ratio engines with noise-reducing chevrons on the engine exhaust ensures the lowest noise footprint possible.

Low-speed devices, such as flaps on the wings, are designed to ensure minimum airframe noise during the landing phase, when aircraft are at their lowest and slowest over our communities.

Other aerodynamic and weight-saving technologies also contribute to better takeoff and landing performance. This enables lower noise footprints for the communities around the airports we serve. These investments bring dual benefits of noise pollution and lower carbon emissions, ensuring that aviation remains at the forefront of environmental innovation.

All pilots are trained to strictly adhere to Transport Canada's published noise abatement procedures at every Canadian airport. Without exception, prior to every approach or departure to be flown, pilots specifically brief considerations to help mitigate noise, including the vertical and lateral profiles to be flown.

WestJet invested early in a tailored required navigation program, or RNP. This pioneered the capability in Canada in 2004 in developing RNP procedures at 20 Canadian airports. New RNP AR approaches incorporate vertical profiles with constant descent angles that are flown at very low thrust settings, with no level segments. Laterally, they are designed to avoid noise-sensitive areas below our flight paths.

WestJet was a key contributor to Nav Canada's public RNP program, which by the end of 2020 will see 24 Canadian airports served by RNP approaches during multiple approach transitions.

In conclusion, I would like to thank the members of the committee for the opportunity to share our story today as it relates to noise mitigation. We are proud of the work we have accomplished and continue to do in this important area.

I would like to also reinforce once more that we remain committed to the safe and responsible operation of our airline, including further investment in fleet, innovation in noise reduction and fuel-efficient technologies, and ongoing consultation and collaboration with the communities we serve.

Thank you, and I look forward to your questions.

● (0905)

The Chair: Thank you very much, Mr. Wilson.

We will go on to Mr. Liepert for six minutes.

Mr. Ron Liepert: Thank you, Madam Chair.

Good morning, gentlemen.

We've had a number of witnesses before us who are suggesting—especially at Pearson in Toronto, but I think we need to think about all of our major airports in the country—to ban or severely curtail night flights. Frankfurt is always used as the example.

I don't think WestJet flies into Frankfurt, but feel free to comment as well.

As my first question, what would be the negative impacts of following what I'll call the “Frankfurt model” that you are aware of, Mr. Strom?

Mr. Murray Strom: I'd like to comment. Thank you for the question.

I've been flying into Frankfurt for 25 years. Frankfurt is a very robust hub.

The one thing I wanted to start talking about is the difference between noise 25 years ago and noise today. It's completely different.

We're very fortunate that we have two robust airlines that can afford to spend, in our case, $15 billion on new aircraft. That is the key to noise abatement. You can see a 60% noise reduction, or up to a 90% noise reduction compared to the old stage 3. That's the biggest single thing we can do as an airline, and with the support of the House of Commons, we've been able to do that.

When I flew into Frankfurt 25 years ago, there was a whole section of cargo airplanes flying in Frankfurt. When I fly in there today, there are none. All the jobs associated with those cargo airplanes and the night-time flying disappeared. They have gone elsewhere.

The biggest change I've noticed is that it hasn't changed my operation, because we don't fly cargo airplanes. What has changed is the loss of thousands and thousands of jobs in Frankfurt because of this.

Mr. Ron Liepert: There's no question there is an economic impact to recommending that type of action.

Mr. Murray Strom: That's correct.

Mr. Ron Liepert: Okay.

I'd like to ask you about a more personal situation. I represent a Calgary riding, and I know both of you are familiar with Calgary approaches.

Since the new runway, the approaches have changed, certainly, from the west side. My riding, which is a half an hour's drive from the airport, is now under a flight path that is giving me no end of grief from my residents, despite what you're saying about reduced noise over the past few years.

One of the things that I asked Nav Canada was why they couldn't move that flight path five miles to the west, where very few people live, and if they needed to, five miles to the east, coming in on the other side, where very few people live. They maintained, if I'm correct, that there were safety issues, but there were also airline requests for those particular pathways.

Can you tell me, in each case, whether moving that approach five miles to the west and east is feasible? If not, why not? If it is, why aren't they doing it?

● (0910)

Capt Scott Wilson: Maybe I'll start with that and allow Mr. Strom to follow.

When you take a look at Calgary, obviously you see we have terrain considerations with the Rocky Mountains to the west of us. As long as we can maintain the proper separation and the proper terrain clearance on the way in, there should be no safety considerations of moving an approach path closer to the airport one way or the other.

When we do look, though, at what is optimum for allowing an approach path, which is to keep the arrival rates up and the efficiency of the airport up, obviously what we also look for is the shortest number of track miles coming into an arrival, which is basically a reduction in greenhouse gas emissions. That usually becomes one of the priorities for the approach as we come into the city or the community.

I don't believe it's safety considerations, but there would be loss of an efficiency and more greenhouse gas emissions over the communities where we fly.

Mr. Murray Strom: I agree with Scott's comments.

For us, it's about efficiency. We plan on being at idle power on approach, from the top of descent all the way to 1,000 feet, because when you're at idle, you make no noise. You make wind noise, and that's it. That's our objective.

It reduces greenhouse gases, saves money on the fuel, and gets the passengers to their destination as soon as possible.

Mr. Ron Liepert: Let's say I tell my constituents that the reason they're flying over our communities is that Nav Canada and the airlines have concluded it is the greenest and most efficient route, regardless of the impact on communities. Is that fair?

Mr. Murray Strom: My comment to that is that we follow Nav Canada's procedures and the airports' consultations with the communities. The approach Nav Canada and the communities have decided is the best is what we're going to follow.

Mr. Ron Liepert: I know, but you would have some input into that, obviously. You're saying that the reason is not a safety issue but an efficiency issue and a greenhouse gas issue.

Mr. Murray Strom: Yes, we're always looking for the most efficient approach.

The Chair: You have 30 seconds.

Mr. Ron Liepert: Go ahead. I'll pick it up later.

The Chair: Mr. Graham is next.

Mr. David de Burgh Graham (Laurentides—Labelle, Lib.): I'll follow up on one of Mr. Liepert's points.

The new runway at Calgary is 14,000 feet, if I recall. At Toronto Pearson, a lot of the runways are under 10,000 feet. I don't know the answer to this, but is there any impact on airplane noise from different runway lengths and boundary zones of airports for surrounding communities? How much of a difference does that make?

Capt Scott Wilson: One of the primary reasons for the length of the runways in Calgary is, of course, that the airport is almost 3,600 feet above sea level. Atmospheric conditions, density or altitude mean you are normally going to require more runway.

Whenever we do take off, we try to do what's called a balanced field takeoff. We try to use the minimum amount of thrust to depart a runway. The benefit of a longer runway is that it allows us to basically use more runway as we gain speed so that we can use less thrust for takeoff.

With regard to a shorter runway, the requirement would be to be closer to maximum thrust for departure.

Mr. David de Burgh Graham: Then a shorter runway does have an impact on noise for sure.

Capt Scott Wilson: Potentially.

Mr. David de Burgh Graham: All right.

With regard to the A320 noise reduction kit—I know that WestJet isn't affected—you said that Airbus doesn't have enough of these available. I have seen a picture of this kit. It's basically a butterfly clip that you put on the wing. How long have they been available from Airbus?

Mr. Murray Strom: It looks like a clip that you put on the wing, but in order to put that clip on, you have to secure it inside the wing. This means that generally an aircraft has to be in a major overhaul, because you have to drain the fuel tank of all the fuel and you have to open up the entire wing. Then you have to have individuals climb into the wing to secure it and hook it up.

Airbus, right now, has a shortage. We had a plan in place. Just like with everything, it takes time to get the plan in place. Unfortunately, Airbus doesn't have the kits. We've asked Airbus if we can manufacture our own kits, and they told us that we can't. It owns the patent on the kit.

We're doing everything we can—trust me—to get this installed as soon as possible. I know more about these generators now than I ever wanted to know about them. Again, it's a 3% reduction in noise, whereas a new airplane is 60%, so that's where Air Canada has really put its efforts.

Mr. David de Burgh Graham: How many A320s are there in the fleet?

You gave us percentages, not a raw number.

Mr. Murray Strom: Yes, we gave percentages. What we're doing right now.... We have a combination of the 737 MAX arriving and the Airbus fleet leaving. To actually come up with a hard number every single time, I would have to take that back to our maintenance to get the hard number. We're going to eventually end up with about 50 Airbuses, and they will all be converted with this change.

The Airbus is a very quiet airplane. It just has a little whining noise just in this one section. We're going to fix it, but it's a 3% reduction. Right now, we're worried about bringing the new A220s in, and the new 737 MAX. Next year we're getting 18 of the 737 MAX. That's our number one emphasis right now.

● (0915)

Mr. David de Burgh Graham: Are retro fixes like this common on other aircraft? Is this something that has happened before, or is this new to the A320?

Mr. Murray Strom: As far as I'm aware, it's just for the A320 problem.

Mr. David de Burgh Graham: Okay, so no other aircraft.... Aircraft manufacturers don't have a habit of saying, “Here, we found this little doohickey that will reduce the noise on your airplane.”

Mr. Murray Strom: No, they don't.

Mr. David de Burgh Graham: Another line I want to take on this is consumers' choice.

Do you, as airlines, do anything to inform consumers about the noise of the aircraft that they can be booking their flights on or the options that they have—a reminder, for example, that a flight is going to be at night over a community? Is there anything being done on that side of things by any airline?

Mr. Samuel Elfassy (Vice-President, Safety, Air Canada): There is nothing that is currently accomplished to communicate that question that you just asked.

Mr. David de Burgh Graham: Is there any intention to look at that kind of thing, even as a public relations thing? You could say, “Just so you are aware, this flight costs this much, but guess what? It doesn't bother the neighbourhood, versus this flight, which does.”

Mr. Samuel Elfassy: We provide opportunities for passengers to buy offsets to reduce their carbon footprints, but nothing as it relates to noise currently.

Mr. David de Burgh Graham: Mr. Wilson, you talked a lot about the RNP approaches earlier, the RNP program. In your own experience as a pilot, does that have any impact on your flight—having the straight-in approaches versus the older tradition of holds and...?

Capt Scott Wilson: Yes, it's one of the greatest innovations, I think, that we'll see, particularly as it pertains to safety, noise and carbon footprints.

RNP approaches are unique in many ways. The first thing is, of course, that it utilizes the satellite constellation, the navigation capability of the aircraft and the training of the pilots. There are no ground-based requirements whatsoever. It allows you to basically use different separation for terrain, and Calgary is quite unique. We actually have the first approaches in the world that have been qualified to do what's called RNP on arrival, which allows us to basically do the curved approaches and have reduced separation that way.

What it also allows us to do is either avoid terrain or avoid noise-sensitive areas. The benefit, of course, is that you not only are always in constant descent, which keeps the thrust back and the noise down, but you also can basically curve the path as required. Straight-in approaches are required when you have, say, ground-based navigation systems such as an ILS, an instrument landing system. The benefit of RNP is that we can tailor it uniquely to the situation that we're working in—the airport environment, the communities, etc.—while gaining greater efficiency and safety, and the smallest noise footprint possible.

Mr. David de Burgh Graham: Will RNP be available for SVFR pilots anytime soon?

Capt Scott Wilson: You'd be surprised what you can actually get in a configuration a small aircraft now to fly these approaches—so, yes.

The Chair: Thank you.

Mr. Nantel is next.

[*Translation*]

Mr. Pierre Nantel (Longueuil—Saint-Hubert, NDP): Thank you very much, Madam Chair.

My thanks to all the witnesses for being here.

We have been talking about A320 and C Series aircraft, but I would like to know whether the new Boeing 777 is equipped with the Pratt & Whitney PurePower engine. Can anyone tell me that?

[*English*]

Mr. Murray Strom: The new Boeing aircraft use a consortium engine. Pratt & Whitney is involved with them. There's also a European manufacturer on it.

[*Translation*]

Mr. Pierre Nantel: I represent the constituency of Longueuil—Saint-Hubert. This is a little biased on my part, but it was Pratt & Whitney that invented the PT6 turboprop, which is man's best friend after the dog and the horse. They also developed the PurePower engine, which, as you said, is extremely effective in reducing noise.

Are you going to be able to equip your fleet with that engine? You tell me that Boeing uses a consortium engine. Do you have PurePower engines in your housings?

[*English*]

Mr. Murray Strom: I'd have to go back to our maintenance division to check. The new Bombardier airplane, the A220, which is the C Series, is built in Montreal. It has a Pratt & Whitney engine. I'm going to have to check the the engine manufacturer on the 737. Unfortunately, I fly the 777, which is the big one. I've been involved with the 737, but I'll have to check back with maintenance on it.

[*Translation*]

Mr. Pierre Nantel: Mr. Wilson, has Westjet Airlines acquired quieter engines, like the PurePower?

● (0920)

[*English*]

Capt Scott Wilson: With our fleets, particularly with the Boeing 737, there's only one engine variable. That's the LEAP-1B engine. It basically is a 40% reduction in the noise footprint compared to the aircraft that we purchased only 10 years earlier. Although not PurePower and not a product that way, it is one of the quietest engines. It's the only engine you can get on the 737 MAX, but it's a very quiet engine.

Mr. Pierre Nantel: With these engines being more quiet, either the PurePower or the other engine that you're talking about, are they also much more fuel-efficient?

Capt Scott Wilson: Yes, they're roughly 20% more fuel-efficient than the engines they're replacing.

Mr. Pierre Nantel: That's outstanding.

[*Translation*]

I would like to ask you a question about noise management. I am from Longueuil—Saint-Hubert, and you can be sure that I am well aware of the problems with noise from flight schools. A number of witnesses have said that Transport Canada has kind of left noise management to the communities or to the not-for-profit organizations that run the airports.

Would you like Transport Canada to better regulate those activities and establish standards for noise? I am thinking, for example, about the requests that people living near the Dorval airport made this spring. They complained that noise monitors were being installed as the airport saw fit.

If Transport Canada were to establish standards and more centralized regulation, would that help to ease those ongoing conflicts? When you live next to an airport, of course, you know that there will be noise. But would certain measures not be better enforced if Transport Canada were more involved?

[*English*]

Mr. Murray Strom: I have the pleasure to fly to most of the major airports in the world. I can say that the noise abatement procedures of Transport Canada, Nav Canada and the local airport authorities are some of the strictest in the world.

You have certain countries that don't have any at all, because aviation is number one to them in the Middle East, but throughout Europe and most of North America, including Canada, they have very thorough procedures. Our pilots are trained on every single departure. They brief the procedures and they follow the procedures. If they don't, we're quickly made aware of it.

Capt Scott Wilson: I would agree with Murray's comments. When I take a look at Transport Canada's engagement, particularly with the airport authorities and Nav Canada and the airlines in Canada, I think we have a unique system here. We work together.

[*Translation*]

Mr. Pierre Nantel: Okay.

So you are acknowledging that this is in fact a community organizing to solve the problems of being next to the airport, rather than waiting for the government to become involved. Right?

[*English*]

Capt Scott Wilson: Having lived under an airport flight path myself for many years, I certainly understand how the communities feel. Just as a starting point, one thing I will point out is that I lived under the departure end of runway 20 in Calgary, and compared to 20 years ago, the noise has almost disappeared.

Communities can and should have a say in the system as well, but we obviously have to find some impartial way of determining what is the right balance, looking at the efficiencies and the investment versus the requirements to keep an arrival rate up to maintain an efficiency coming into an airport and to continue to provide Canadians with the travel that they expect.

[*Translation*]

Mr. Pierre Nantel: Mr. Elfassy, you told my colleague Mr. Graham that you do not provide compensation for noise caused by aircraft.

However, since you provide the opportunity of offsetting the carbon footprint, is the company that benefits from you buying its carbon credits accountable to Air Canada?

To whom is it accountable for the real use of the money invested by your customers?

[*English*]

The Chair: I'm sorry, gentlemen, but you've gone over time, so there's not sufficient time—

Mr. Pierre Nantel: Sorry about that.

The Chair: —to answer. Perhaps we can get that answer back to the member through the meeting or after the meeting.

Go ahead, Mr. Iacono.

[*Translation*]

Mr. Angelo Iacono (Alfred-Pellan, Lib.): Thank you, Madam Chair.

My thanks to the representatives of the airline companies here this morning.

My question goes to both companies.

In your opinion, is there a correlation between the noise pollution caused by aircraft and cardiac illness in adults, or chronic stress?

● (0925)

[*English*]

Capt Scott Wilson: With all due respect, based on my background as a pilot, I don't know if I'd be the appropriate one to give you an answer on that. I don't know if there's any correlation as you've described.

Mr. Murray Strom: I echo Scott's comments. I'm very good at flying airplanes, but not good at health effects. I leave that to my doctor. I'm sorry.

[*Translation*]

Mr. Angelo Iacono: Okay.

However, you are aware of all the studies that have been done on health problems, correct?

Perhaps you are not in a position to describe or confirm the correlation, but are you, or are you not, aware that there is one?

[*English*]

Capt Scott Wilson: I'm aware of numerous papers out there that have tried to provide correlations. I'm not sure of the validity of the science. Again, I don't think I'm a fair one to comment on such things.

Mr. Murray Strom: I have read the World Health Organization's paper and I've read the papers that don't agree with it. I'll have to leave this up to the experts.

[*Translation*]

Mr. Angelo Iacono: Have you received any comments, complaints or grievances from your pilots on this noise problem, or is it not an issue for them?

[*English*]

Capt Scott Wilson: Having grown up in this great country through many levels of aviation in Canada and over the years, I've certainly operated aircraft that have been a lot noisier than the ones that I operate now.

When we brought the Boeing 737 MAX into Canada a year ago, my first experience operating it was that I noticed how quiet it was on the flight deck and in the cabin, as well as the benefits that we see on the ground. The nice thing is that the new aircraft with new technologies are quieter on the ground and over the communities where they fly, and they're a much better experience on board for our passengers and guests as well as for the crew members who operate them. We see the benefits as well.

Mr. Murray Strom: I agree with Scott and his comments. We actively monitor our aircraft inside the flight deck. If a pilot raises a concern about the noise in the flight deck, we'll do a study on the flight deck to ensure that the noise level is where it should be. If it's slightly elevated, we'll provide the pilots with noise-cancelling headsets to eliminate the noise.

[*Translation*]

Mr. Angelo Iacono: Thank you.

[*English*]

Mr. Strom, in your opening comments you made a reference to the noise being different in the last 20 or 25 years. Is that what your comments were?

Mr. Murray Strom: Yes.

Mr. Angelo Iacono: If it's the case that the noise is different, something has changed, because I don't think 20 or 25 years ago we had so many people complaining about airplane noise. Something has changed. I see you're acknowledging my comments with a nice smile. What I would like to ask you is, what has changed?

Mr. Murray Strom: I remember that when I was hired by Air Canada 32 years ago, I would sit outside the Dorval airport at the Hilton in Dorval and listen to all these wonderful DC-8s, 727s, DC-9s and 737s take off, and I love airplane noise. That's why I got into aviation. To hear the thrust of these engines was magnificent.

I go out there now, and you don't really hear anything. That has changed. Technology has changed the airline industry. We hear more about the noise now, and that's for various reasons, but the airplanes themselves are 90% quieter, I believe, in some cases. I miss it personally, because I like airplanes that make noise, but the airplanes are far quieter now than they were before.

Mr. Angelo Iacono: Since you love noise, I invite you to come in to my riding in Laval. You can sit down with my constituents and enjoy the noise, because they hear it quite often.

Mr. Murray Strom: No, no.

Mr. Angelo Iacono: This is what they're telling me—that there is a change.

I'd like to ask you another question. Are planes flying lower than before? Is the altitude much lower than before?

Mr. Murray Strom: No, it's higher.

Mr. Angelo Iacono: You say it's higher.

Mr. Murray Strom: Yes.

Mr. Angelo Iacono: Can you also tell me, Mr. Wilson, how is it for you? Are planes flying at the same altitude, higher or lower?

Capt Scott Wilson: The benefit that we see with RNP approaches —I'll go back to this—is that when you're close to an airport, for a safety perspective we fly what is a 3° gradient path, so that's roughly 300 feet per nautical mile. Regardless of what we're able to accomplish beyond that, when you're close in proximity to the airport, three miles back, you're roughly going to be a thousand feed above ground. That hasn't changed from the 1960s to where we are today.

● (0930)

Mr. Angelo Iacono: Thank you.

My last question is to both of you. What is your input on flying, on flying the routes, on flying the pathways you're using, the altitude, everything? What is your input with respect to flying planes?

Capt Scott Wilson: Are you asking what the input is from a pilot's perspective?

Mr. Angelo Iacono: No, from an airline perspective.

Capt Scott Wilson: From an airline....

Mr. Angelo Iacono: Who decides what route to take, at what time to take it? Who controls all that? Who dictates all that?

Capt Scott Wilson: I think probably the best way to start with that is actually with the flying public. Basically, the flying public lets airlines know through where they purchase tickets, through their trends on what times they like to leave and on what routes, and that basically proves the viability.

It then goes to the network planner, who basically builds a network schedule and utility around that schedule to provide the best service possible to travelling Canadians and the public. Then from that point it goes to our flight dispatch systems, which try to provide the most optimum routing, and then, basically on the day that a flight is being flown, it's the pilot in command, working with Nav Canada.

Mr. Angelo Iacono: Mr. Strom—

The Chair: I'm sorry, Mr. Strom. Could you somehow get that answer to Mr. Iacono?

We move on to Mr. Hardie.

Mr. Ken Hardie (Fleetwood—Port Kells, Lib.): I'll give the first question to my colleague, Mr. Rogers, if he promises to make it a short one.

Mr. Churence Rogers (Bonavista—Burin—Trinity, Lib.): I do.

First of all, thanks, gentlemen, for being here this morning. Thank you, Chair.

My question is for Mr. Strom.

Aircraft noise is not an issue in my area of Newfoundland and Labrador, specifically Gander airport, particularly since Air Canada cancelled morning flights and night flights, which makes life very difficult for travellers and for the business community trying to get out of the province and into other parts of the country. It makes life very difficult for me as an MP. It really cut my two-day weekends down to one day, because I cannot get back on the island on a Thursday night.

I want to know, Mr. Strom, what might be the rationale for cutting these flights?

Mr. Murray Strom: I will have to talk to our corporate planning people and I'll get back to you with the answer for the rationale. I don't have that information in front of me at this time.

Mr. Ken Hardie: All right. It's my turn, I guess.

Thank you, Mr. Rogers.

RNP—what does that stand for?

Capt Scott Wilson: RNP stands for required navigation performance.

Mr. Ken Hardie: Thank you.

Have any of you had to deal directly with neighbours who are complaining about the noise of your aircraft?

Capt Scott Wilson: I'd be happy to take that on to answer.

Yes—

Mr. Ken Hardie: I just need a short answer, because I have a follow-up question. The answer, then, is yes. Okay.

Has there ever been any discussion with people who profess to be affected by this noise about the whole issue of active noise cancellation in their homes? There are things you can buy that are basically like noise-cancelling headphones, which could cancel the noise in a bedroom, for instance.

Capt Scott Wilson: I'm familiar with the technology on board the aircraft. Our fleet of Bombardier Q400s has active noise cancellation capability in the cabin. I'm not aware of how it applies or of any technology that actually does it in the home. It's a good point, but I'm not aware of the technology in the home.

Mr. Ken Hardie: Somebody might want to do a pilot program.

Capt Scott Wilson: Good thought.

Mr. Ken Hardie: Let's talk about noise itself. Maybe you're not quite the right people to ask, because you may not track this, but do you have a profile developed of the people who are most susceptible to noise—men versus women, age, etc.?

Mr. Murray Strom: I don't have that information. I don't believe we've studied it. It was addressed in one report by the World Health Organization, but I don't have the information in front of me at this time.

Mr. Ken Hardie: Just from past experience when I used to program radio stations, I know that women handle noise or annoyance differently from men; they will react differently. As well, we've come through an era—I would call it the ear-damaged generation—when people have been subjecting themselves to very loud stereos in their cars or personal devices and everything else.

You would wonder whether perhaps part of what you're experiencing, with the level of complaints going up even with quieter planes, is with people who have somehow altered their hearing with these other devices, making them more susceptible to the noise. I'll ask you to comment on that.

Also, if you're a member of the flight crew and you're in the cabin, you're dealing with a constant level of noise throughout the whole journey, whereas if you're on the ground, it's sporadic. There's noise, then there isn't noise, and then there's noise again. Has that been examined in the course of trying to come up with an overall management plan for noise at airports?

● (0935)

Mr. Murray Strom: Again, I'm not the expert on your first question.

On the second question, the newer airplanes are considerably quieter in the cabin. I'm not aware of any studies that have been made of the effect of what the noise does to an individual. We have Health Canada guidelines for our cabin crew, our passengers, and our pilots, and we generally follow those as guidelines.

Mr. Ken Hardie: Do you participate at all in the planning of airports, particularly the alignment of runways versus what's going on in the surrounding area? It would be one thing, for instance, to have a flight path coming in over a light industrial area such as you normally see close to airports, and another to have one coming in over a new development of townhouses.

Mr. Murray Strom: We consult with the local airport authorities to assist them wherever we can. We offer our simulators up for testing of new approaches. We work with Nav Canada also.

We're a participant, but we're not the lead group on it.

Mr. Ken Hardie: Are you ever invited to or asked to participate in zoning decisions by municipalities near airports?

Mr. Murray Strom: We are not, so far as I'm aware. I believe that's handled by the airport authority.

The Chair: Okay. Thank you very much, Mr. Hardie.

We move on to Mr. Jeneroux.

Mr. Matt Jeneroux (Edmonton Riverbend, CPC): Thank you, Madam Chair.

Thank you for being here today, and for coming right before Christmastime as well. We appreciate it.

We recently had the Minister of Transport here, and he made an interesting comment along the lines of the carbon tax. He says he hasn't heard from anybody that the carbon tax has been detrimental.

Have you guys heard that the carbon tax has been detrimental? Can you perhaps comment on what the carbon tax means to your particular industry?

Mr. Murray Strom: I'm not the right person to answer that question. We'd have to bring together three or four different departments to give you the correct answer. I can get that answer for you, but I take care of the day-to-day flight operations of the aircraft, and that information lies in other departments.

Mr. Matt Jeneroux: You have no personal opinion, Mr. Strom. Is there maybe something that you've heard around the office?

Mr. Murray Strom: I don't like offering an opinion unless I have the facts to deal with.

Mr. Matt Jeneroux: Do you have an opinion, Mr. Wilson?

Capt Scott Wilson: I'd be aligned with Mr. Strom that way, in terms of offering an opinion in an area that's not my expertise.

However, I will strongly point out that we've talked about both the very strong level of capital investment in airframes and engines that produce the lowest level of noise possible and the greatest amount of efficiency. Therefore, on anything from a tax perspective, I'd also hope that it would be offset by looking at the level of investment that an airline is making.

Mr. Matt Jeneroux: Your companies are part of the National Airlines Council of Canada. Is that correct? There was a letter sent from your association to Minister McKenna, with a cc to Minister Garneau and Minister Morneau, highlighting the negative impact of the carbon tax.

Let me ask this a different way, then. Do you think that perhaps a study on the impacts of the carbon tax, at a committee like this, would be useful for your airline or for the association?

Mr. Murray Strom: I believe it would be, yes.

Mr. Matt Jeneroux: Sorry. Could you say that again?

Mr. Murray Strom: I believe it would be, yes.

Capt Scott Wilson: I would concur.

Mr. Matt Jeneroux: Okay.

I'd like to share my time with Mr. Godin.

● (0940)

[*Translation*]

Mr. Joël Godin (Portneuf—Jacques-Cartier, CPC): Thank you.

As I listen to the testimony today and consider the cost of replacing aircraft as a solution to the noise problem, I see that the consumer always ends up paying the bill.

I would like to introduce a motion on behalf of Kelly Block, who submitted the notice of motion on October 26. The motion reads:

> That the committee undertake a study on the impact of the federal carbon tax on the transportation industry as follows: meeting on the carbon tax's impact on the aviation industry, one meeting on the carbon tax's impact on the rail industry, one meeting on the carbon tax's impact on the trucking industry, and that the committee report its findings to the House.

I believe that is important to have the facts and to do this exercise rigorously in order to have clear answers. We all agree about protecting our environment, but we have to measure the cost of doing so, and to find out what we are talking about.

[*English*]

The Chair: Thank you very much, Mr. Godin.

Go ahead, Mr. Jeneroux.

Mr. Matt Jeneroux: Thank you, Madam Chair.

The Chair: I assume you're speaking to the motion.

Mr. Matt Jeneroux: I am speaking to the motion.

To the witnesses, I apologize. Based on your comments here today, plus the comments of the minister, I think it's important that we look into this as quickly as possible. Perhaps it could be when we come back from the break. Maybe it's even during the break that we would take the time to look at this.

Often we see on the other side that we adjourn debate and this issue is unfortunately taken off the table, so we'd like to move it today, again with regard to some of the comments that were made here and some of the comments the minister has made.

Thank you.

The Chair: Go ahead, Mr. Liepert.

Mr. Ron Liepert: I would support the motion. If we took this time, I think that it would also give us an opportunity to expand on what has been made clear this morning.

Nav Canada, which in many ways tries to accommodate policies of the government at the time, is making decisions that are impacting constituents—certainly my constituents—for what I can see are efficiency reasons for airlines. That's all well and good, but once we get these efficiencies, then we layer a carbon tax on industry, which defeats the whole purpose and results in aircraft having to fly over communities that have a high density.

In addition to that, it has been made clear that a reduction in emissions is a primary reason that some of these flight paths are directed over high-density areas. I think that's something that could be explored as well, as we go through discussion on this particular motion.

The Chair: Go ahead, Mr. Godin. Speak briefly, please.

[*Translation*]

Mr. Joël Godin: Thank you, Madam Chair.

I would like to tell my colleagues that witnesses have told us this morning about the importance of renewing aircraft fleets. Reducing the noise and the environmental footprint means buying new aircraft. However, I recognize that that involves costs and repercussions for consumers. Moreover, we must be conscious of the fact that producing new aircraft implies using resources and raw materials, which is a factor in increasing the environmental footprint.

We must also remember that there are a number of aircraft graveyards, with planes that are no longer used and that have been withdrawn from service. These factors must be measured. It is important for us as parliamentarians to consider the situation as a whole so that we can make informed decisions. To do so, I suggest that we wait for answers to our questions. Our future is at stake and I feel that it is our responsibility. That is why this motion is important for us.

Thank you.

[*English*]

The Chair: Thank you, Mr. Godin.

Mr. Nantel is next.

[*Translation*]

Mr. Pierre Nantel: Thank you, Madam Chair.

Gentlemen, you may not be aware, but you will probably not be surprised to learn that I am currently making a lot of effort to bring all parties together around the problem of global warming. The Conservatives too have a point of view about it, I feel. In my opinion, we cannot deny the evidence on global warming. Before we take any measures, I would like to see the Conservative Party become involved in a serious discussion on global warming.

It is self-evident that reducing our carbon footprint comes with costs. We can clearly see that a game of political obstruction is under way. I don't think that is in anyone's interest. I will conclude simply by saying that, of course, I am going to oppose this motion. However, I am making a gesture by suggesting that the proposal be presented again once your leader has agreed to participate in the leaders' summit on global warming that I propose to hold next January.

Thank you.

● (0945)

[*English*]

The Chair: We'll go back to Mr. Godin again—briefly, please.

[*Translation*]

Mr. Joël Godin: In response to my colleague's remarks, I will say that we Conservatives are very sensitive to the environment. Our approach is perhaps different from that of my NDP colleague, but I believe that, before we take any initiative, we have to know what we are talking about. That is why I think it would be prudent to conduct a study and to organize meetings to determine what the real impact would be. We are just realizing that electric cars are not as environmentally friendly as scientists claimed in the past. We have to have those discussions before we make decisions that affect the future. So I invite the committee to accept this motion so that we can obtain answers to our questions and thereby do some excellent work as parliamentarians.

Thank you.

[*English*]

The Chair: Thank you very much, Mr. Godin.

The motion is rightfully before us. We all—

Go ahead, Mr. Nantel.

[*Translation*]

Mr. Pierre Nantel: Since you have been kind enough to give me the floor again, let me make it clear that, of course, I am inviting Prime Minister Justin Trudeau to be part of the summit. Clearly, no one person is all black or all white.

[*English*]

The Chair: Thank you very much, Mr. Nantel.

You all have the motion in front of you. I don't see any further debate.

Mr. Matt Jeneroux: I request a recorded vote.

The Chair: A recorded vote is fine.

(Motion negatived: nays 6; yeas 3)

The Chair: Thank you very much to the witnesses for being here. I'm sure we will hear more from each other as we complete this study.

We'll suspend for a few moments while our witnesses for motion 177 on flight schools come to the table.

● (0945)

(Pause)

● (0950)

The Chair: Let us bring our meeting back to order, please.

Thank you all. I appreciate everybody's patience.

From the Canadian Owners and Pilots Association, we have Bernard Gervais, president and chief executive officer; from The Ninety-Nines, Inc., International Organization of Women Pilots, we have Robin Hadfield, a director on the international board of directors and governor of the east Canada section; and we have Judy Cameron, a retired Air Canada captain, director of Northern Lights Aero Foundation, as an individual.

They will of course be speaking to motion M-177, under which we are studying the challenges facing flight schools in Canada.

Ms. Hadfield, would you like to go first? You have five minutes. When I raise my hand, please make your closing remarks.

Ms. Robin Hadfield (Director, International Board of Directors, Governor, East Canada Section, The Ninety-Nines, Inc., International Organization of Women Pilots): Thank you.

My personal involvement as a pilot started 39 years ago and has continued in general aviation. The Hadfield family spans over 60 years in aviation, with three generations and four captains at Air Canada and with backgrounds as flying instructors, flying surveys up in the Arctic, and flying with an indigenous-owned northern Ontario commuter, Wasaya Airways, operating into the isolated reserves. It gives one a very unique perspective on my brother-in-law, who was commander on the space station.

In my background and with my family, our daily discussions centre around aviation. They've given me a very broad understanding of many of the issues facing the aviation sector.

While the motion has to do with flying schools and I do not have an in-depth background on that, within general aviation I certainly know the problems that we're hitting. What I wanted to do today was to deal with where we see problems. The Ninety-Nines is the largest and oldest organization of women pilots in the world, with over 6,000 members in pretty much every continent now.

This is not just an issue in Canada; it's an issue everywhere. I want to go through what we see as the problem and then, very quickly, what I see as the solution. We can deal with it further with questions if you want to.

The first problem is the very high cost of flight training, as you've heard in your meetings to date. Realistically, it costs $80,000 to $90,000 for a student to go from private pilot to the commercial licence with a multi-engine instrument rating. These high costs pose a special barrier, especially for students coming from households with a low income.

A solution is to make student loans that don't require collateral and co-signing available at the flying schools that are offering a diploma program, just as we have with other colleges and universities. Right now, those flying schools that do offer college programs are taken away from colleges and universities and classified as private colleges, so student loans and OSAP do not apply for them. It's creating quite a hindrance.

A precedent does exist for funding beyond loans. As you heard just the other day from, I believe, one of the pilots here—or it could have been Stephen Fuhr—back in the fifties, when you got your pilot's licence, they actually gave you a rebate once you reached a commercial licence, in order to help with those costs. A student loan forgiveness program could work the same way.

We don't have enough flying instructors. The instructors working at flight schools traditionally make a starvation wage. One of the solutions is to forgive the student loan if, for example, a graduate stays and works for two years as an instructor. Perhaps they could get a 40% rebate on what their student loan forgiveness would be, and if they stayed for four years, it would increase. In the same way that we do this for doctors, nurses and teachers that go up into the north, the same type of program could apply for flight students.

One of the other issues is that there are not enough young people considering it as a career. To me, making aviation a high school credit course would make a lot of sense. I've talked to our Ministry of Education in Ontario. As a past school board trustee, I'm aware of what's going on in the high schools, and they're really missing the mark. They are clueless when it comes to aviation. While there is a program in Ontario that has aviation and aerospace, they focus completely on items that are outside of aviation itself.

There aren't enough females. That's simple. Again, we can facilitate this by raising awareness in high schools, raising the profiles of successful females as role models, having material in packages for the guidance departments and teachers—including examples of female pilots who have successful careers—and having career days that have female professional pilots present at them. Organizations such as the Ninety-Nines already facilitate this with our current programs, working in conjunction with provincial ministers and creating new programs such as our “Let's Fly Now!” program.

Using that model in Manitoba, the Manitoba chapter of the Ninety-Nines has an airplane and works with the University of Manitoba and the St. Andrews flight school. They bought a simulator. It cost $15,000. It's free for girls to come in and use for learning procedures. Within two years, they have had over 20 women receive their pilot's licence, which is more than most of the Ontario flight schools combined in terms of female pilots.

● (0955)

There are not enough indigenous. We need to encourage flight schools into remote areas, such as Yellowknife, Thompson, or Senneterre. Although good flying weather is vital for a flight school, we have to go where they are; they're not coming down where we are.

We don't have enough flying schools. There are insufficient facilities for potentially new flight students. We can improve the business case for expansion because we are looking at enormous global shortages of pilots. A good business case exists to offer economic incentives to expand. Low-interest loans could help with the high capital cost for expansion in such areas as hangars and training aircraft.

There are a high number of foreign students who are taking up spaces in our flight schools. I believe the number right now is that 56% of all the students in the flying schools are from other countries. The country subsidizes the students to come here. The flight schools charge almost double the amount of tuition for them, so there's no incentive for our flight schools to not take them. The foreign students are good for our economy and they're good for the local areas where they come in. However, we have to recognize that these students leave immediately after they get their licence.

● (1000)

The Chair: Thank you very much, Ms. Hadfield.

We'll go on to Mr. Gervais.

Mr. Bernard Gervais (President and Chief Executive Officer, Canadian Owners and Pilots Association): Thank you. Good morning.

I will quickly tell you a little about COPA, the Canadian Owners and Pilots Association, which was founded in 1952.

It's the largest aviation organization in Canada and is based in Ottawa. We have 16,000 members across the country, mostly private pilots and commercial pilots, with some airline pilots, and Commander Hadfield is our spokesperson. We're the second-largest of about 80 members of the International Council of Aircraft Owner and Pilot Associations, with representation at ICAO. Our mission is to advance, promote and preserve the Canadian freedom to fly.

We represent general aviation in the country. General aviation is pretty much everything that is not scheduled flights and military flying; it's pilot training, agricultural flying, bush-flying operations and many others. As I said, it's anything but scheduled flights and military flying. On the civil air registry right now, out of about 36,000 aircraft, over 32,000 are general aviation aircraft. Almost 90% of the aircraft in the civil air registry are general aviation aircraft.

The impact of GA on the economy is $9.3 billion. Why am I bringing this up? It's because GA plays a niche role in pilot training.

Most flight training aircraft are also constituents of the GA fleet. The first step in any pilot's career is walking through the front door of a flight training unit, and that's most likely a general aviation flight training unit. This training takes place in smaller GA-type airports and aerodromes more suited to the training environment and the type of aircraft operations that we see in these smaller GA airports all around the country.

Also, with COPA being GA, over the last five years COPA has taken more than 18,000 youngsters aged eight to 17 up for an aircraft ride in a program called “COPA For Kids”, so right there, in the last five years, we could have solved the whole pilot shortage problem with the COPA For Kids program.

What challenges do new pilots face? First they have to get into a PPL program—“PPL” being a private pilot licence—and get through that. There is no financial aid for this available anywhere in the country, except for scholarships. It's up to them, their parents or anyone else to get that money to put up front just to walk through this first step of a PPL. Anything above that is the commercial pilot licence.

Most flight training costs are not eligible for student loans unless done as part of a college program, in which case it would only be the classroom portion. Flight training units are only available in certain areas, usually the most densely populated. There's only one flight school in Yukon and none in the Northwest Territories or Nunavut.

In terms of the availability of instructors, applications from students are actually being turned down due to lack of instructors, or there's a long waiting list and they're told to come back in a year when there may be room for them in a flight training unit. Especially if the students just want to go for a private pilot licence, this recreational and private pilot licence thing is put on the back burner. The idea is to get some foreign students, but also, if you're in the airline training program, they're looking for airline pilots. The ones who will become instructors, the ones we will need, are left out.

Challenges for the flight training units include the availability of qualified instructors. With a few exceptions, most instructors need to be employed by an FTU, a flight training unit, to use their instructor rating. Other challenges include using older aircraft.

As well, another challenge faced by the flight training units is the fact that flight training units are at aerodromes that are quite old, and there are also capacity issues because of airport size, air traffic control capabilities, and the need to balance—as was presented earlier—flight training capacity with responsible aerodrome operation, especially in certain high-density areas, such as Saint-Hubert in Longueuil.

Also, for the FTUs and these airports, the only federal funding that can help these airports to develop, sustain and look at other ways is ACAP funding, but these funds are only for airports that have passenger service, and most of the GA airports do not have that.

● (1005)

As I said earlier, most people see aviation in Canada as airliners and very few smaller aircraft, when actually it's the other way around: 90% to 95% of all aircraft in the country are general aviation. Some people also see aviation in the country as the 26 big airports of the national airport system, but there are over 1,500 airports.

In conclusion, to ensure that the supply chain for pilots stays healthy, the front door of the general aviation world has to stay open. It means protecting community airports so that the flight schools have places to live and grow, ensuring that adequate talent and experience is retained at the instructor level. It means preserving the flying clubs and social networks associated with airports, including community, in terms of what goes on at their local airport so that they are connected and realize the important role that this asset is playing locally and in the big picture.

The Chair: Thank you very much, Mr. Gervais.

Captain Cameron, welcome.

Ms. Judy Cameron (Air Canada Captain (retired), Director, Northern Lights Aero Foundation, As an Individual): Thank you for this opportunity to speak today.

I was the first woman in Canada to fly for a major airline when I was hired by Air Canada in 1978. After 37 years and more than 23,000 flying hours, I retired from the airline as a Boeing 777 captain three years ago.

The biggest challenge for aviation in Canada today, and therefore flight schools, is the looming pilot shortage. You have heard that by 2025, Canada will need 7,000 to 10,000 new pilots. By 2036 a staggering 620,000 commercial pilots will be required worldwide. Part of the problem is that 50% of the population—women—are not engaged. I began my flying training 45 years ago, yet there's been very little progress in the number of women flying as airline pilots. Since the very first few were hired in 1973, the percentage of women flying for airlines globally has only increased to 5% today.

The main reason for this is the lack of role models. Countless times I've heard girls say they've never seen a female pilot before. Women in aviation need to be more visible, demonstrating their capability, credibility and passion for flying.

A 2018 study by Microsoft showed that women are more likely to do well and have a sense of belonging if they can see positive role models in a STEM career. They need to see other women performing a job before they will consider it. Research has also shown that this exposure needs to start when girls are young, as interest in technology begins at around age 11 but falls off at around age 16. A hands-on, engaging introduction to aviation is needed as part of the curriculum in elementary school. An aviation ground school course incorporating physics, math and meteorology could be offered to high school students.

As you heard from Bernard, an actual flight is even more successful to spark the passion to be a pilot. My first flight in a small airplane completely changed my career path. I had been pursuing an arts degree. My first flight was the catalyst that gave me the will and the determination to pursue an aviation career. Annual events like Girls Take Flight, an initiative started by the Ninety-Nines, provide this opportunity.

I'm a director with the Northern Lights Aero Foundation, which inspires women in all sectors of aviation and aerospace. Northern Lights has held an annual awards event for the last 10 years to highlight Canadian women who've made significant accomplishments in these fields. Past winners have included Dr. Roberta Bondar and Lieutenant-Colonel Maryse Carmichael, the first female Snowbird commander. We have a mentoring program, a speakers bureau and scholarships. In addition, we do outreach at aviation events. Our foundation has managed to attract strong support from industry. Companies are finally realizing that our activities assist in the recruitment of women. The Northern Lights Aero Foundation introduces girls and young women to positive role models and mentors who have been successful in their field.

You have heard about the high cost of flight training. At $75,000 to $100,000, it is a barrier to both sexes. A national funding program that provides such remedies as tax incentives to flight schools, student loans for the private pilot licence—which, as you heard, is not eligible for any loans right now and costs around $20,000—and loan forgiveness for pilots committing to work as flight instructors for a specified period of time could mitigate this.

The low pay for flight instructors is a significant challenge to flight schools. I just spoke to a young female instructor in Edmonton about this. She's been 10 years in the field. Instructors are paid between $25,000 and $40,000 a year. Their income is variable, as they're not on salary unless they're working for a university or a college. They're only paid when the weather is suitable for flight. This makes it difficult for schools to retain experienced instructors, who leave as soon as possible for more lucrative jobs, sometimes not even in aviation. Elevating this pay could also make it a viable permanent career choice for pilots who wish to remain at home each night instead of spending days away from their family. A lack of instructors will ultimately choke the pipeline that ensures a reliable supply of future pilots.

Women and the younger generation as a whole are also concerned about work-life balance. This dissuades some from entering flight schools. Junior pilots at an airline often have the most onerous schedules, which involve many consecutive days away from home during the time when they're most likely to be starting a family. Such innovative programs as Porter Airlines' “block sharing”, which means sharing a schedule of flying, eases the transition for women returning from maternity leave. This is a difficult time in a pilot's career; I can personally attest to this, as I have two daughters, and I returned to work in as little as two and a half months after having one of them.

● (1010)

In closing, I will say that one of the biggest challenges to flight schools is actually attracting women to walk in through their door. With support from government and industry to increase exposure to STEM subjects in the classroom and incentives for young people to pursue flight training and remain in the industry, I believe we can turn the tide on the impending pilot shortage. I had the most amazing job in the world, and I wholeheartedly encourage other women to pursue it as well.

Thank you.

The Chair: Thank you very much, Captain Cameron.

Thank you to all for your excellent recommendations.

Mr. Jeneroux, you have four minutes.

Mr. Matt Jeneroux: I'm sorry, Madam Chair; how many minutes did you say?

The Chair: Given the fact that we're at 10:13 already and we're trying to divide it up, it's four minutes.

Mr. Matt Jeneroux: I'm okay; I was just curious about how many minutes I had.

Thank you all for being here. It's great to have you here.

It's really an honour to have you here, Captain Cameron. Thank you for taking the time to be here.

What is the main reason we're seeing pilots leave the industry? We talk a lot about attracting new and young pilots to the industry, but why are pilots leaving the industry?

I'll start with you, Captain Cameron.

Ms. Judy Cameron: My experience is airline. Generally, people don't leave an airline career. Once you start on the seniority pathway, the progression is pretty much assured as long as you can pass your check rides.

This is just conjecture on my part, but I'm thinking that if you're starting out, you've paid all this money, and you're having difficulty finding a job.... There's this joke that the difference between a junior pilot and a pizza is that a pizza will feed a family of four.

Those early years are tough. That's the only reason I can think of for you to leave: You've found another way to make a living that is more secure.

Again, once you're with an airline, you generally continue, because you're on a great career path.

Mr. Matt Jeneroux: Ms. Hadfield, would you comment?

Ms. Robin Hadfield: That's an issue I am familiar with, because out of the graduates, only about 40% actually stay in aviation. A lot of them whom I know first-hand do not want to go up into the north, especially when they're from the large urban areas. They go up there and spend a couple of years. They don't make very much, because the third-tier commuter lines are well aware that the pilots will be leaving to go to the next level up, with the goal of Air Canada or WestJet. Very few go there and say they want to stay up in the north. Some do, but that's not the majority.

A lot of them have had scares. The northern operators had in the past been known for trying to push the limits on overweighting planes and for some maintenance issues. If they've had a scare, they'll just say, “I've had enough, and I'm not making very much money”, and they'll walk away. With females, they have problems where.... You know, they're young and the guys are young; they start dating each other and they break up, and that's it. They leave the industry.

There's a whole sort of...but pay is a huge issue. It's a tough one to get around with the way the whole industry has been structured, back from the beginning of airlines.

● (1015)

Mr. Matt Jeneroux: Okay. Perfect. Thank you.

Mr. Gervais, maybe you'll be able to work your answer in during some of the other questions. I have only a minute left, and I want to put a notice of motion on the table.

This would be a verbal notice of motion, Madam Chair.

The Chair: You want to give a notice of motion? Okay.

Mr. Matt Jeneroux: Tell me when you're ready for me to read it.

The Chair: Go ahead.

Mr. Matt Jeneroux: Okay. It reads:

> That the committee undertake a study of the impact of the federal carbon tax related to the transportation industry as follows:
>
> Two meetings on the carbon tax's impact on air passengers;
>
> Two meetings on the carbon tax's impact on railway customers;
>
> Two meetings on the carbon tax's impact on trucking customers;
>
> and that the committee report its findings to the House.

I have it written out here, Marie-France.

The Chair: Thank you.

You still have 45 seconds left.

Mr. Matt Jeneroux: Wonderful.

Mr. Gervais, maybe you could take that time to respond to my question, please.

Mr. Bernard Gervais: Our feeling is that if the pilots are on a pathway to becoming airline pilots, there's such a demand around the world that there's no time to fill these voids and these gaps.

As to why they would be leaving, as Captain Cameron said, usually you don't leave an airline career; it's just that there's no time to get there. They get taken and brought into the business, into the airliner world around the world, because there's so much growth and so much more air traffic.

Mr. Matt Jeneroux: How much time do I have left?

The Chair: You have four seconds. We'll move to Mr. Iacono.

Mr. Angelo Iacono: Thank you, Madam Chair.

Thank you, ladies and gentleman, for being here this morning.

Captain, more and more people are flying, are travelling, and therefore airlines are busier and thus making more money. Do you agree?

Ms. Judy Cameron: It's a cyclical industry. Maybe they are for now. I've seen it go up and down.

Mr. Angelo Iacono: Therefore, why not invest internally in order to fill up this void? Why aren't the airlines investing in their own personnel? You have many flight attendants on board who have that experience of being flown and serving the public, so why not invest in them taking up these courses? Why isn't there a program that exists internally whereby you give that initiative to your employees to move up the ladder, to move up to the next level and become a pilot? Since we're having this shortage, why isn't that being done?

Ms. Judy Cameron: I wish I could answer that as an airline executive, which I am not. It's an interesting question. One of the members of the audience today works with a foundation called Elevate, and they're studying right now why women don't look at aviation as a career for economic security. They certainly would make a lot more money as a pilot than as a flight attendant. I don't have the answer to that.

There is a model in Europe, a cadet program. For example, Lufthansa has a European flight training academy. They do the ground school, and then once you've finished, you start with a feeder airline to Lufthansa. Eventually you move into Lufthansa. There's a signing bonus once you start, and you gradually repay your training once you start with a feeder.

There are pros and cons to that model, as Robin may attest. I'm not sure why Air Canada hasn't looked at it. They haven't had to because in the past people were clambering over each other to get an airline job when there was quite a lack of them. This is a complete change now.

Mr. Angelo Iacono: There's no shortage when it comes to finding flight attendants, right?

Ms. Judy Cameron: I suppose not.

Mr. Angelo Iacono: I think that would be a positive way to look at it.

My second thing—and the other two can also respond to the questions—is why not also look internally when it comes to pilots, as to pilots giving the courses? A teacher, for example, after two or three years, is going to take a sabbatical to go do research. Why not initiate a program in which you have pilots of a certain number of years' experience initiate six months of training for new pilots, new students? This way you don't have the shortage of trainers. You're saying there's a shortage of students and there's a shortage of pilots. Why not look internally to fulfill both?

● (1020)

Ms. Judy Cameron: The shortage is at the beginner level. It's at the private pilot, the commercial pilot level.

Once you're with the airline, the airline has its own internal training program, and they've quite successfully recruited many retired pilots to come back and teach simulator. That's an entirely different skill set from the instructors that they're referring to, the instructors that are needed to get the young ones into the aviation field.

Mr. Angelo Iacono: Would you like to add something to that, Ms. Hadfield?

Ms. Robin Hadfield: I would. On the idea of flight attendants, I personally know over 15 flight attendants who have become pilots and who are working their way up, but they've had to do it totally on their own. There is no incentive for an airline to do their own training.

Concerning the shortage of pilots, there's a misconception that people don't want to become pilots. In Springbank there are two flying schools with a waiting list of over 300 students. There were 78 air cadets who did not get their power licence this summer because of lack of instructors, and at the busiest flying school in the country, at Brampton, in October they put out a notice that they are not taking any more new students.

There is a waiting list of people in Canada who want to learn to fly. The seats are taken by international students. Then they leave the country, meaning we have a shortage of instructors, meaning we can't take that waiting list of students.

It's a cycle. The schools need money, so they take the international students, and that kicks the door shut for our students.

The Chair: I'm sorry, Mr. Iacono; your time is up.

Mr. Nantel is next.

[*Translation*]

Mr. Pierre Nantel: Thank you, Madam Chair.

Ms. Hadfield, as you quite rightly pointed out, there is no link between the education system in Canada and flight schools, although we have a real need for pilots. What also strikes me is when Ms. Cameron suggested that people in the north, where there is such a need for pilots, will not move to the south to take that training for any length of time. However, I am well aware of the situation in flight schools in Saint-Hubert, where there are major concerns. We have always bemoaned the fact that they are all concentrated in that location, right above the houses of ordinary folks.

However, as you explained, is quite sad to see that the schools are accepting a lot of foreign pilots who take places, not just from Canadian students, but also from Canadian pilots. That means that the pilots leave. Would you like the committee to recommend setting up a network? I am talking about the Aerospace Industries Association of Canada, the AIAC, which set up the Don't Let Go Canada program. We met Mr. Hadfield to talk about that.

Should we not have a concerted approach to establish a training program for young people, particularly young women, so that they can get started in the field?

[*English*]

Ms. Robin Hadfield: I think that if we can set up programs at the high school level, where students who are not that familiar with airports.... As urban areas have expanded, we've lost the small airports and general aviation. People don't see airplanes flying around, and our youth can't look up and say, “Oh, I want to do that.” They go into high schools and focus on STEM programs, but those don't include aviation.

I think it's about bringing it back into the high schools and also about having a loan and debt repayment program—making it affordable so they can go to school—to keep our own students in the flight schools. You're looking at half our population that is making under.... How is a family with a combined income of $80,000 going to afford putting their kid through these schools?

Also, the payback is slow. When our son was at a flying school, I said to him that he was going to have to go up north and be up there for years, that he was going to be pumping gas and cleaning puke out of airplanes for the pleasure of making $20,000 a year. Then, when you start making your way up there—you get married, you have kids—and you're making $100,000, you go to Air Canada and you drop to $40,000.

It's a cycle. For the flight schools, I think we have to make a definite loan repayment program. You can't stop them from accepting foreign students, but if we can have our students afford to get there.... Canada is very well known around the world for our aviation sector. That's why other countries are paying for their kids to come here.

● (1025)

[*Translation*]

Mr. Pierre Nantel: Education is very clearly in provincial jurisdiction, which can complicate things a little. However, Mr. Gervais, I believe that you are aware of the current situation at Saint-Hubert. In my opinion, there is no doubt that one of the solutions would be to plan the distribution of flight schools better. Why not bring the CEGEPs in Quebec to chat with their local airports and see about installing a flight simulator and a few aircraft, thereby establishing a flight school?

Currently, in my constituency of Longueuil—Saint-Hubert, those schools are so thick on the ground that they have become a problem. I am the first to sing the praises of aerospace and to proclaim that Longueuil—Saint-Hubert is the birthplace of a number of wonderful technologies of which we are proud. However, when almost 25% or 30% of the places in the École nationale d'aérotechnique are vacant, I see it as a deplorable situation.

[*English*]

The Chair: Mr. Nantel, I'm sorry, but there's just not enough time for an answer right now. Possibly it could be intertwined it with some other answer.

We'll move on to Mr. Hardie.

Mr. Ken Hardie: Thank you, Madam Chair, and thanks to all of you for being here.

It sounds as if the free market system has really imploded in all of this. On the one hand, you have higher load factors generally, at least on the flights I take, and fares are still pretty robust, especially in the north, yet you have pilots practically lining up at food banks, a phenomenon that we've seen in the States.

You tell me that on the one hand there are a lot of people who want to go to flight schools here, but the trainers make peanuts and the tuition is really expensive. I'm sorry, but where's the money going?

Ms. Judy Cameron: It's expensive to operate an airplane.

I was just going to say, speaking to some earlier questions, that there are low-cost solutions too. Just being able to watch an airplane take off and land, there's no place in Toronto where you can do that. Vancouver has a great observation area. In Toronto you have to park on the side of the highway to see an aircraft.

There used to be a wonderful opportunity to have people in the flight deck. We can't do that anymore. It was one of the best selling tools. It probably cost a lot of parents a lot of money over the years if they had children watching us take off and land.

Mr. Ken Hardie: Yes, but the question is that the key people—the trainers and the students and the new pilots—all tend to.... Who would want that job if it costs you a lot of money to get trained and you end up making peanuts? Heck, I started off in radio, and it was exactly like that. Then again, we really wanted to do it.

I'm just wondering if we're dealing—millennials back home, don't listen for a second—with a millennial attitude here as well: "We want it all. We want it now."

One of you is saying yes and the other says no.

Ms. Judy Cameron: I've heard that from some people who are training some of the newer pilots.

I can only attest to my own experience. I did do the northern experience. I flew up north for a year and I did pump gas on a DC-3. I did roll fuel drums. When Air Canada hired me, I went to my interview board, and they said, "Bring your log book and bring anything that you think might get you hired", so I brought pictures of me—black and white—rolling fuel drums, wearing a flight suit and steel-toed boots. Maybe that helped me get the job.

The thing about flying is that unlike a lot of other occupations, it's really enjoyable. It's a lot of fun, and some people are just driven to pursue it no matter how difficult, but the costs are getting out of hand now.

I think the answer is to have forgivable loans, particularly if you're willing to work as a flight instructor or if you're willing to work in a northern community. I think there have to be some solutions.

Mr. Ken Hardie: Robin, do you want to comment on this as well?

Ms. Robin Hadfield: Yes. I think that what you see in the difference in generations is actually not a lack of motivation. I think people still want to fly, and the waiting lists for flying schools attest to that. What the airlines find is that the skill sets they come in with are a little bit different, and that could be more from the millennial side, where they don't have the same type of leadership skills.

However, this is also very rare within the industry. As Judy already said, the airline industry is up and down and up and down, and I've seen this through all the generations of our Air Canada pilots and with—

● (1030)

Mr. Ken Hardie: I have one quick question in the time I have, and I'm sorry to be so brief here.

Are we using military training to its fullest? Could the military basically make a little money on the side by training pilots?

Ms. Robin Hadfield: Yes, but I believe the military also has a shortage of pilots for exactly the same reason—instructors. They can't get them in fast enough.

Mr. Ken Hardie: I might have a little extra time if you want to finish your other thought—

Oh, Mr. Gervais...?

Mr. Bernard Gervais: I want to add something.

I think MP Iacono also asked why they don't train. There's a highly regulated environment for training for a private pilot licence or for a commercial airline and everything around that, and it's been around for many years. It's because there's a safety issue on this. It can't be really "I'll train you." You have to be an instructor to train people.

There's a protocol, and you'll see this in the Canadian aviation regulations. There's a protocol and a process that's tried and true, and it's really been there very long. Maybe that could be reviewed also to accelerate the process.

The Chair: Thank you very much.

We'll move to Mr. Graham.

Mr. David de Burgh Graham: Thank you.

One of the peculiarities about the industry that I found out when I myself started flying in 2005 was that it's the only industry in which the new pilots trained the newer pilots. There seems to be very little of the experienced pilots passing their knowledge on down.

At the same time, you can't have a 737 pilot training a 172 pilot, because it's a completely different skill set, so how do we get experienced pilots to pass their knowledge on to brand new pilots to augment the instructor base?

I open that generally to all of you.

Ms. Robin Hadfield: Financially, you have to give an incentive. If you have a retired airline pilot who is invited to come back to the airline to teach in simulators, they will make $70 an hour. We were talking about this earlier. If you offered to have them go into a flight school, they would make $30 an hour, so they're going to say "no way"—

Mr. David de Burgh Graham: That's if they're lucky—

Ms. Robin Hadfield: —but if you made that a tax-free income for them, they would all flood in. Pilots are the cheapest people you can meet in the world.

Some hon. members: Oh, oh!

Ms. Robin Hadfield: If you offered a pilot $30 an hour and it was tax-free, it would be the same as making $70, and you would probably have a huge percentage of retiring pilots going into these flight schools. They love working with the younger kids. They like seeing them fly. They love being in airplanes. Give them a tax incentive and they'll do it.

Mr. David de Burgh Graham: I have a lot of different questions, so I'll have to try to keep it brief.

We talked about the cost of flight training, as you just did, and also about mitigating the student loans for the students, but as I discussed a couple of weeks ago with respect to the Germanwings crash, we saw the risk if a student goes through their training and then loses their medical certificate. How would you mitigate this risk on loans so that you don't have people hiding illnesses and disabilities in order to pay off that loan?

Ms. Judy Cameron: That is a concern. You spend all of this money and then find out that you are medically disabled. It's fairly stringent to get a class 1 medical, so maybe there should be some sort of a parachute clause, an insurance that you can pay into, whereby if you lose you licence medically, you don't have to pay back $75,000 to $100,000 in training.

That is a difficulty. Something that you don't face in almost any other occupation is the requirement to keep your class 1 medical.

Mr. David de Burgh Graham: This is a different topic that we haven't discussed at all before. When you get a degree, you get "B. A." after your name, or whatever it is. When you become an engineer, you get a "P.Eng."

You go through years and years of school and there's no post-nominal for a pilot. Should there be one?

Mr. Bernard Gervais: Absolutely.

A voice: There is "captain".

Voices: Oh, oh!

Mr. David de Burgh Graham: There is, but not for a co-pilot or a bush pilot. When you get your four bars at Air Canada, you become a captain, but if you're flying in any other part of the industry....

Ms. Robin Hadfield: You're still "captain".

A voice: Yes.

Mr. David de Burgh Graham: That's fair.

When I was learning to fly, we learned on paper CFSes and paper VNCs. Now everyone is on ForeFlight. Are we losing confidence of the pilots by switching to digital means?

Mr. Bernard Gervais: No, not really. It's just a different way of learning. Nowadays, if you look at how things have changed regarding technology, the younger generation is still doing...they know, and they can find as much information as we did in the paper form. Everything is still there.

No, I don't think so, not that we see.

Ms. Robin Hadfield: I think it has increased. I believe that it has helped the safety aspect. I fly solo into Oshkosh, which for a week is the busiest airport in the world, and if my ForeFlight ever crashed as I was coming in there, I'd be lost. I'd turn around and head towards the lake.

● (1035)

Mr. David de Burgh Graham: That's exactly my point. We—

The Chair: Thank you very much. I'm sorry, Mr. Graham.

Mr. David de Burgh Graham: Thank you.

The Chair: Monsieur Godin is next.

[*Translation*]

Mr. Joël Godin: Thank you, Madam Chair.

My thanks to our fine witnesses. Their comments are really interesting.

It seems to me that we are somewhat blasé about the effect that our lack of pilots will have on the future of the aviation industry. Could you tell me about the importance of pilot training? The number of flights is increasing by 4% to 5% per year. If the aerospace industry does not find a solution, what will be the impact on that increasing number of flights?

That question is for the three of you.

Do you want to start, Mr. Gervais?

Mr. Bernard Gervais: Yes.

The shortage of pilots is worldwide. The fact is that, if Canada does not find an answer to it, we will have to hire people from other countries.

The industry is growing around the world, but I do not believe that we should start by recruiting people from other countries. We have the capacity to train them in Canada. Most of our pilots were trained as a result of the British Commonwealth Air Training Plan. About 130,000 pilots were trained in its military bases. Canada's pilot training is internationally renowned. We have the ability to do it; we just have to roll up our sleeves and get going.

As Mr. Nantel said earlier, there should be a national training program, now and for the future. Canada is the home of the aerospace industry. The country was largely opened up by aviation.

We must do it, otherwise Canadian companies around Montreal, Calgary, and Vancouver, like Viking Air, will suffer as a result. Canada is the home of aviation

Mr. Joël Godin: Thank you.

Do the other witnesses want to add any comments? I see that they do not.

In other professions, like medicine and accounting, firms are fighting over students.

Should we not give it some thought and encourage companies to invest in recruiting young men and young women with the potential to become pilots? The company could sponsor them, in a way. with financial assistance that would help them pay off their loans more quickly and have a promising and comfortable future.

It is important for the industry to have pilots so that it can continue to function.

[*English*]

Ms. Robin Hadfield: Are you referring to a cadet program?

[*Translation*]

Mr. Joël Godin: No, it would come later than that. Cadets have not yet made made their decisions. But the programs could be run together.

The solution should come from the aerospace industry, which sponsors your cadets, as in the case you mentioned in your testimony, or in other circumstances. When the industry sees young, motivated people with potential, why not sponsor them and support them so that they can view the future in a positive light?

Mr. Bernard Gervais: I really agree with you. Some companies are already doing it. Pratt & Whitney and Bombardier have air clubs. However, there is a whole other stage.

Last year, the Air Canada Pilots Association and COPA developed a career guide and established pilot scholarships to encourage people to enter the field. But that was not really sponsorship in the strict sense.

Companies would do well to have sponsorships, exactly as you say. It is perfectly possible. The costs would be minimal, but there needs to be a plan. COPA would be ready to work with people. To start programs like that, we could use airports and aerodromes located away from the problem areas we were talking about earlier.

[*English*]

The Chair: Thank you very much.

I'm sorry, Mr. Godin, but your time is up.

Go ahead, Mr. Badawey.

Mr. Vance Badawey: Thank you, Madam Chair.

I'm going to share my time with Mr. Graham. I think he has a few more questions, but I do want to introduce a notice of motion, Madam Chair, that I'm hoping will be entertained at the next meeting.

On that notice of motion, Madam Chair, as you know, we've been diving into pollution-related costs and we're trying to get as much input as we can from all sides of the floor. Therefore, my notice of motion, Madam Chair, reads as follows:

> That the Official Opposition present to the Committee its plan to deal with transportation-related pollution costs.

I'll be presenting that at the next meeting.

With that, Mr. Graham, go ahead. The floor is yours.

● (1040)

Mr. David de Burgh Graham: Thank you.

I don't have too much more, but I do have some more.

Mr. Gervais, you mentioned COPA For Kids and you used to be involved with the ABPQ, and as you know, I am as well. I've flown in at least five of these Kids in Flight events. Can you speak to the real impact of this? I know of the 50 or so kids I've taken, only one of which puked—I'm very proud of that—I'd say about half or maybe even more were girls, and it doesn't seem to be translating into an interest at the flying school.

Do you have any thoughts on why that is?

Madam Cameron, you were talking about seeing those role models. My instructor is a woman. She's an excellent instructor and an excellent pilot. She's flying at all these events. She does the ground school for all the kids, so they are seeing it. How do we convert that into an interest?

Ms. Judy Cameron: I'd argue that they're still not seeing it enough. I think it needs to start at the elementary school level and then progress to, say, high school guidance counsellors. They need educating.

There are a lot of misconceptions out there. One is that you have to be a math whiz to be a pilot. That's not true—

Mr. David de Burgh Graham: That's only when you're in trouble.

Ms. Judy Cameron: You have to be able to do simple addition and subtraction.

The other is that you have to have perfect 20/20 vision. That's also not true.

I think the problem is that we're just not getting young kids interested early enough, and I'm a perfect example. I had to go back to school before I started my aviation college. I had not taken grade 12 math. I was in an arts program at university, so I had limited my options already.

I think you need to get them younger.

I can't answer your question as to why that first flight wasn't absolutely motivational for them. It certainly was for me, and there are a lot of programs like this. The Ninety-Nines has Girls Take Flight. One of our directors at Northern Lights does this. They had 1,000 people this year at Oshawa, where 221 girls and women were taken flying. I'm sure a number of them were interested in pursuing a career after this.

I think it is exposure, having more things like Elevate. Again I'm referring to a lady in the audience. She runs an organization, and they are going to be going to 20 cities across Canada and promoting various aviation careers. She's an air traffic controller, so it's not just pilots; it's air traffic control, maintenance, and different areas. I think kids need to be exposed to this, and the more hands-on experience, the better. It shouldn't just be someone speaking in a classroom.

Mr. David de Burgh Graham: I want to build on that a little bit. When I was a kid, whenever I flew, I always went into the cockpit. It was fun. Then 9/11 happened, and that obviously changed a lot of this.

You're an experienced pilot. Do you see a safety issue? Is there a way of perhaps pre-clearing people who have an interest to get into the cockpit before a flight so that we can bring this experience back? Is that possible?

Ms. Judy Cameron: One of the biggest burning desires for any airline pilot was to be able to have their family back in the flight deck again. If you can't trust your children or your spouse, really who can you trust?

Mr. David de Burgh Graham: There was that Airbus crash in Russia....

Ms. Judy Cameron: It's really a pity that this can't be addressed. We have NEXUS cards. We have various security things. I'd like to see that change.

Ms. Robin Hadfield: Could I speak on that?

Mr. David de Burgh Graham: Of course.

Ms. Robin Hadfield: I think with the thousands and thousands of kids we've taken up for flights, they see it as a free flight. We have found with our program that it's the parents who are the hindrance. When the child says they want to become a pilot, their natural reaction is, “You're going to crash and die. No. You can't do that. Nobody in our family has ever done that.”

We changed, and this year in the program you have to already be of flying age. We had seven events where we took them up. If they were in high school, the parent had to come for the flight as well. At every single one of the events, we had anywhere from one to three people sign up, with the flying school that was there talking to them on the spot. I think we have to look at the older kids, not the little ones.

Mr. David de Burgh Graham: Mr. Gervais, would you comment?

Mr. Bernard Gervais: To add to what Robin was saying, last year COPA started giving anyone of flying age, 14 to 17, free online ground school and a logbook to go into flight school. If you're 14 to 17, your next step is to open that door to the flight school. We're pushing for that.

Mr. David de Burgh Graham: Okay.

On the point about danger, when I was in flying school we liked to say that the most dangerous time in a pilot's day was driving to the airport. If people could understand that....

I think the Southwest incident a year ago, when a passenger was sucked out of the window and killed, was the first death on a commercial flight in the U.S. in something like nine years. There's this whole myth of an airplane not being safe. How do we share the fact that it is by far the safest means of travel in the world?

Mr. Bernard Gervais: Last year we, COPA and Transport, started the general aviation safety campaign. They asked us to help them with it. This is a communication tool we're using to show to the general public that flying is safe, extremely safe, so there will be some more publicity and communication out there.

● (1045)

The Chair: Thank you very much to our witnesses. This was very informative. You certainly gave our analysts lots of possible recommendations that the committee might want to put forward. I thank you very much for taking the time today.

I wish everyone here a Merry Christmas.

I have one thought for the committee. I did not plan a meeting for Thursday; we had that discussion. Given the fact that it looks like we will be here, is it the desire of the committee to have a meeting on Thursday? We could try to pull together a meeting on Thursday. If so, I'd like to see overwhelming support for that.

I don't see any overwhelming enthusiasm for trying to schedule for Thursday. Thank you very much.

Again, Merry Christmas. Thank you all very much for your co-operation.

We are adjourned.